

ease. The chapter closes with a study of the effects of temperature in disorders of the respiration.

In the sixth chapter the practical value of the physiological antagonisms of medicines in cases of poisoning is taken up. Here the author gives an account of a number of recent very remarkable instances of the use of this antagonism, one of which is especially noteworthy, occurring in Dr. Fothergill's own practice, in which there was injected hypodermically a full grain of sulphate of atropia, with the result of saving the life of a woman already nearly moribund from a large dose of laudanum, the physiological effects on the circulation and respiration being all the time carefully noted. Almost equally remarkable cases collected from various sources of the successful use of the antagonisms of strychnia and calabar bean, and strychnia and chloral and other poisons, are also related.

The last chapter treats of the use of these antagonisms in ordinary practice, and contains a number of illustrative instances, well but briefly stated, but we cannot give an abstract of it. Indeed it is difficult to state in brief anything of the whole work; it is not such a one as can easily be condensed. We can heartily recommend it to our readers, and perhaps that is all that such a notice as this should be expected to do. A knowledge of its contents cannot fail to be a most valuable addition to the professional information of the average practitioner of medicine.

VI.—LIONET: GENERAL PARALYSIS.

DES VARIÉTÉS DE LA PARALYSIE GÉNÉRALE DANS LEURS RAPPORTS AVEC LA PATHOGENIE. Par le Dr. Camille Lionet. Paris, 1878. (*The Varieties of General Paralysis, in their Relations to Pathogenesis.*)

It is not very long since, that a rather remarkable editorial appeared in a leading eastern medical periodical, commencing as follows: "A strange and formidable disease is stealing upon this country, a disease whose march is slow, but sure, whose grasp is fatal to mind and body, whose touch defiles as well as destroys. This terrible disease is general paresis or paralysis. Thirty years ago it was hardly or at all known in this country; even yet a local case of it has probably not yet occurred in Louisville, in St. Louis, or in New Orleans. On the other hand, in Boston, New York, and Philadelphia it is far from uncommon. In England it has long been known, while in Germany and France it is frequent."

We need not ask a better excuse for a review of one of the most recent memoirs on this disease than the above paragraph. If, as is asserted, general paresis is slowly but surely stealing

over this country, having already blasted the eastern and middle section with its defiling and destroying touch, but has, as yet, mercifully spared the Mississippi valley, it is a fact that should be generally known. If, on the other hand, the extract only illustrates a too common ignorance as to the conditions and prevalence of this most formidable of cerebral diseases, then this ignorance certainly needs to be enlightened.

There is, in our minds, no question but that general paralysis is often misunderstood, and the editorial quoted, though itself exemplifying this ignorance, is therefore timely, and inasmuch as its intention is good and its results cannot be bad, we ought not to make an example of it. When western, and for that matter eastern asylums also, show such various percentages of this disease in their classification of their inmates, it seems even that those whom we should think ought of all men to recognize the disorder, have very different ideas of diagnosis. Such a work as the present one is therefore a fit subject for notice in our columns, and we shall endeavor to give briefly its principal features.

The title of the work, "*Varieties of General Paralysis in their Relations to Pathogeny*," is itself suggestive of something comparatively new in the study of this disease. In all the classifications of insanity there is no species better or even so well established, both on clinical and pathological grounds, as a morbid entity, as is general paralysis. But the varieties of its mode of invasion, in its apparent origin, and in the character and severity of many of the symptoms, are such, that it seems as if it might almost constitute a morbid genus, containing several allied but distinct species. In view of these facts, Dr. Lionet was led to study the affection and its literature to ascertain whether there might not be recognized distinct varieties of the affection, depending upon its etiology. He therefore analyzed the literature of the disease and his own observations, and as a result he classes all general paralytics into two great classes: those self-originating in the individual, and second, those in the etiology of which heredity plays a great part. The first of these are the typical general paralytics; the disease, starting generally from some well marked irregularity of life and excesses of all sorts, runs a regularly progressive course, without remissions, and the patient dies in paralytic dementia within two, three, or four years. The second great class of general paralytics, admitted by the author, form the subject of the larger part of the monograph. After some remarks on heredity in general, he passes in review the opinions that have been expressed before him, on its influence in the production of this affection. Bayle, Calmeil, Pinel, Quatrefages (of Montpellier), Brierre de Boismont and Dagonet, are all quoted as supporting the view that heredity in general plays an important part in the etiology of general paralysis. But besides these, Aubanel, Baillarger, Lunier, and Le-grand du Saulle, have insisted on the influence of hereditary congestive tendencies as predisposing causes over others, and

especially over hereditary insanity, which, indeed, has by some been altogether denied to be ever a cause of this disease. Our author admits two varieties of general paralysis due, at least in part, to heredity. The first of these, general paralysis of congestive origin, usually occurs in individuals of so-called sanguine temperament, plethoric, and of apoplectic tendencies. The disease is characterized by its sudden onset, being preceded by a congestive cerebral attack, or, it may be, by only a period of congestion, without the *ictus*, and following this a longer or shorter interval, the cerebral disorder makes its appearance. Throughout the course of the disease the congestive attacks are apt to appear, either as a passive form with somnolence and even coma, or as apoplectiform crises. Remissions may take place, and, thanks to them, the fatal result may be deferred for five, six, or even eight years from the onset. These remissions, however, are more apparent than real, the patients never recover lost ground; the disease is only temporarily arrested.

It must be allowed that other causes than an inheritance of the congestive tendency may give rise occasionally to this variety; injuries, insolation, suppression of habitual or normal hemorrhagic fluxes, &c., may also serve as its points of origin.

The third variety, or the second in which heredity plays a part, is general paralysis of vesanic origin, and its characteristics are a long prodromic period and true remissions. In these patients the first symptoms are psychic, a more or less notable mental disturbance. There is generally, previous to the pronounced mental aberration, a prodromic period, which has been described by M. Jules Falret as the stage of exaltation. In it, the intellect is sometimes even more active and capable than normally, the memory is quickened, and the sensibilities are exaggerated. But at the same time, the subjects are unreliable, abnormal in their emotions, fickle and often absurd in their judgments, and liable to sudden, transient and causeless fits of violence. As this stage passes on to that of pronounced delirium, the actions and judgment become still more bizarre, they abandon themselves to their impulses, the delusions of grandeur appear, at first moderate and possible, and become more and more extravagant as the disorder progresses; the physical and moral symptoms make their appearance, and the patient passes on to the ordinary advanced stages of the affection. These cases also have their remissions, and they are much more complete than in the other variety. Nevertheless they do not absolutely recover in these, there still remains some mental weakness, and though the duration of the disease is greatly prolonged to perhaps ten, eleven, or fifteen years, the fatal result is only delayed.

These, as we have very briefly described them, are the three varieties of general paralysis which the author seeks to establish. After their description and several pages on their medico-legal aspects, the remainder of the volume is given to the history of

cases illustrating each variety, selected from the literature of the disease. The etiological conditions of these varieties may not be universally admitted, nor perhaps are they always constant and distinct, but they will be recognized, at least in part, by those who have had much experience with this class of patients. In some of Dr. Lionet's collected cases of the second and third varieties, the history of heredity is wanting; this, as he states, is difficult to obtain, but after all it may be too much of an assumption to consider the hereditary tendency always as existing.

In the third variety there are some instances given in which an almost complete recovery took place, and no history of a relapse. These are, however, exceptional, and do not affect the rule as to the unfavorable prognosis. We may say also that, according to the statements of L. Meyer, there is some hope from energetic revulsive treatment in many cases of general paralysis, he having reported seven or eight cures out of fifteen cases treated. This our author does not mention. At the close of the volume the author gives his general conclusions, which we reproduce as summing up the memoir in brief:

1. General paralysis represents a pathological species.
2. Most frequently it arises of itself, without hereditary predisposition.
3. When hereditary predisposition exists the disease presents itself under one of two forms: congestive and vesanic.
4. The hereditary general paralyzes of the congestive type are cases of brain disease before they become cases of insanity.
5. The hereditary cases of the vesanic type, are insane from the beginning.
6. There are therefore three varieties of general paralysis:
 - (1.) General paralysis of individual origin.
 - (2.) General paralysis of congestive origin.
 - (3.) General paralysis of vesanic origin.
7. General paralytics of individual origin never have any remission; and the duration of the disease is only 2 to 4 years.
8. General paralytics of congestive origin are especially remarkable from the frequency of their congestive attacks. They have remissions which are only temporary arrests of the disease. They may live 6, 7, or 8 years.
9. True remissions of long duration as well as long prodromic period, are peculiar to general paralysis of vesanic origin. The duration of this disease varies between 10, 12, or 15 years.
10. The doctrine of partial responsibility, far from seeming correct, appears to me as to be dreaded.